The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

25. (currently amended) A method for varying the state of a propulsion system of a hybrid vehicle comprising:

determining if an engine starting command has been requested;

sensing the state-of-charge of an electric storage medium;

sensing the temperature of an engine coolant of an internal combustion engine;

sensing the temperature of said electric storage medium;

determining if a fault condition is present;

sensing the operating condition of a motor/generator; and

varying a degree of electric power being used to drive said vehicle, said degree of electric power corresponding to ~~sensed vehicle operating conditions~~ the temperature of the engine coolant..

26. (original) The method as in claim 25, further comprising:

operating a motor/generator in a first mode of operation for providing a starting force to said internal combustion engine and in a second mode of operation for generating an electrical charge;

varying the starting speed of said motor/generator in said first mode in response to the state-of charge of said electric storage medium; and

varying a prime pulse to said internal combustion engine in response to the state-of-charge of said electric storage medium.

27. (original) The method as in claim 25, wherein the step of determining if an engine starting command has been requested includes monitoring the position of a shifter of said vehicle, monitoring said internal combustion engine RPM, monitoring the position of an ignition key, and monitoring the voltage of said electric storage medium.

28. (currently amended) A propulsion system controller fro use in a hybrid vehicle comprising;

a motor/generator for providing starting force to an internal combustion engine in a first mode of operation and for generating an electrical charge in a second state of operation;

a first operating system, said first operating system varying the prime pulse to an internal combustion engine and the starting force applied to said internal combustion engine by said motor/generator, said operating system varying the starting force and the prime pulse according to engine coolant temperature and batter state-of-charge;

a second operating system, said second operating system varying the state of operation of said motor generator during a starting sequence of said internal combustion, said first operating system and said second operating system instructing said motor/generator to operate in between said first and second modes of operation;

C1

a third operating system, said third operating system varying a degree of electric power being used to drive said vehicle, said degree of electric power corresponding to ~~sensed vehicle operating conditions~~ the engine coolant temperature;

a means for sensing the state-of-charge of an electric storage medium, said means for sensing state-of-charge of said electric storage medium being operated by said first operating system;

a means for sensing the temperature of engine coolant of an internal combustion engine, said means for sensing the temperature of said engine coolant being operated by said first operating system.

29. (previously presented) A method of controlling a hybrid powertrain, the hybrid powertrain including a motor-generator, an internal combustion engine, and a transmission, for a vehicle comprising:

sensing the state-of-charge of at least one battery;

sensing the temperature of an internal combustion engine;

sensing the temperature of the at least one battery;

controlling the motor-generator operation based upon the state of charge; and

controlling the motor-generator based upon the temperature of the internal combustion engine.

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30. (previously presented) The method of Clam 29 further comprising the step of controlling the transmission based upon the operation of the motor-generator.